

1 **"MACHINE FOR CONSTRUCTING THE SIDE WALL**
2 **OF A CYLINDRICAL TANK"**

3 **ABSTRACT OF THE DISCLOSURE**

4 The machine is adapted to supply, manipulate and position steel strip, fed from
5 a coil, so as to bring it into gapped relationship beneath the side wall of a partly
6 constructed, elevated tank. This is done so that the strip can be welded to the side
7 wall to add a course. It is the objective to ensure that the tank wall is plumb (vertical)
8 and in radius (both as to curvature and relative to the center of the tank) and that the
9 width of the gap is optimized, at the weld point. The machine comprises a 'floating'
10 main frame or platform suspended on a mobile undercarriage by four pivotally
11 mounted cylinders. The cylinders are independently responsive to instruments
12 monitoring the elevation, levelness and plumbness of the tank wall and the width of
13 the gap. The main frame carries the coil and carries the strip and the tank wall in the
14 vicinity of the weld point. The instruments control the cylinders to vary the elevation,
15 radius and attitude of the main frame to thereby achieve the objective and ensure
16 desirable 'fit up' and gapping at the weld point.